

Comparisons of Job Characteristics

Focus Occupation: Welders, Cutters, Solderers, and Brazers (51-4121)

Associated Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 77

Focus Occupation: Welders, Cutters, Solderers, and Brazers (51-4121)

Associated Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Building and Construction	4.0	14.3	4.9	<<	Extensive education and/or training may be required
Mechanical	6.8	12.8	9.5	<<	Extensive education and/or training may be required
Public Safety and Security	6.9	11.5	4.0	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 70

Focus Occupation: Welders, Cutters, Solderers, and Brazers (51-4121)

Associated Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Repairing	3.4	7.7	5.9	<	A higher skill level may be required
Equipment Selection	3.3	5.2	5.4	0	Current skill level may be sufficient
Installation	1.7	5.0	1.6	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 76

Focus Occupation: Welders, Cutters, Solderers, and Brazers (51-4121)
Associated Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Extent Flexibility	4.8	11.0	5.2	<<	Extensive improvement in abilities may be required
Manual Dexterity	6.5	9.6	10.3	0	Current ability level may be sufficient
Trunk Strength	5.7	9.0	7.4	<	Some improvement in abilities may be required
Static Strength	5.0	8.6	6.9	<	Some improvement in abilities may be required
Gross Body Equilibrium	3.2	6.1	3.2	<<	Extensive improvement in abilities may be required
Dynamic Strength	3.5	5.6	4.2	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 65

Focus Occupation: Welders, Cutters, Solderers, and Brazers (51-4121)
Associated Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015)

Work Activities	Exclusivity of Activity
Apply cleaning solvents	41
Fabricate, assemble, or disassemble manufactured products by hand	11
Move or fit heavy objects	8
Requisition stock, materials, supplies or equipment	54
Use acetylene welding/cutting torch	54
Use hand or power tools	2

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 78

Focus Occupation: Welders, Cutters, Solderers, and Brazers (51-4121)
Associated Occupation: Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters (47-3015)

Tools and Technologies	Exclusivity
Aerial lifts	13
Bandsaws and accessories	26
Cleaning equipment	11
Cutting and crimping and punching tools	3

Electrical measuring and testing equipment	7
Face and head protection	7
Forming tools	2
Holding and clamping tools	3
Indicating and recording instruments	2
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Marking tools	11
Measuring and layout tools	3
Metal bending and forming machinery	17
Passenger motor vehicles	13
Personal communication devices	2
Pneumatic tools	8
Power tools	2
Prying and bending tools	10
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Temperature and heat measuring instruments	6
Tool attachments and accessories	12
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.